

CLAIMS

What is claimed is:

1. A plant comprising

5 (a) a heterologous nuclear expression cassette comprising an inducible promoter operably linked to a DNA sequence coding for a transactivator, and

(b) a heterologous plastid expression cassette comprising a transactivator-mediated promoter regulated by said transactivator and operably linked to one or more DNA sequences of interest.

10

2. The plant according to claim 1 wherein the inducible promoter is a wound-inducible or chemically-inducible promoter.

15 3. The plant according to claim 2 wherein the inducible promoter is the tobacco PR-1a promoter.

4. The plant according to any of claims 1, 2 or 3 wherein the transactivator is T7 RNA polymerase and the transactivator-mediated promoter is the T7 promoter.

20

5. The plant according to any of claims 1 through 4 wherein at least one of the DNA sequences of interest in the heterologous plastid expression cassette codes for a cellulose-degrading enzyme.

25 6. A plant which expresses a cellulose degrading enzyme.

7. The plant of claim 6 comprising a heterologous DNA sequence coding for a cellulose degrading enzyme stably integrated into its nuclear or plastid DNA and under control of an inducible promoter.

8. The plant of claim 7 wherein the inducible promoter is a wound-inducible or chemically-inducible promoter.

527
327

The plant according to claim 8 wherein the inducible promoter is PR-1.

10. A package of seed of a plant according to any of claims 1 through 9.